

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 6, lines 23 to 29 through to page 7, lines 1 to 2, with the following paragraph:

Sample handling. Each cow had 10ml of blood drawn off the coccygeal vein into ~~vacutainer~~[®] VACUTAINER[™] tubes containing EDTA, and 50ml of raw milk drawn off one randomly chosen quarter by hand milking into a sterile centrifuge tube. Three ml of whole blood was added to 4ml of ~~Ficoll-Isopaque~~[™] FICOLL-PAQUE[™] plus gradient (Amersham Pharmacia, density 1.078g/ml) and centrifuged for 30-40 minutes at 500xg at 18°C. Supernatant was removed, and cells were washed with 2 cycles of PBS (NaCl 43.3gm, Na₂HPO₄ 11.4gm, KH₂PO₄ 1.33gm, pH 7.3) and centrifuged at 500xg for 15 minutes. Cells were counted with a haemocytometer, resuspended in 100ul of 0.2N NaOH, boiled at 110°C for 20 minutes to extract DNA and re-centrifuged at 500xg for 3 minutes.

Please replace the bridging paragraph beginning on page 2, lines 28 through to page 3, lines 1-4, with the following paragraph:

Another method of the invention includes the steps of (A) providing a biological sample from the animal; and (B) subjecting the biological sample to nested PCR using at least a first pair of primers for amplifying the IS900 ~~ISO900~~ region of the Map genome and a second pair of primers for amplifying a portion of the amplified IS900 ~~ISO900~~ region, wherein the presence of an amplification product specific for Map in the PCR reaction mixture indicates that the animal is infected with Map. In this method, the first pair of primers can be primers P90 and P91 and the second pair of primers are primers J1 and J2.

Please replace the paragraph beginning on page 3, lines 9-12, with the following paragraph:

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Also within the invention is a kit for detecting a Map infection in an animal. The kit can include a first pair of primers for amplifying the IS900 ~~ISO900~~ region of the Map genome and a second pair of primers for amplifying a portion of the amplified IS900 ~~ISO900~~ region. In this kit, the first pair of primers can be primers P90 and P91 and the second pair of primers are primers J1 and J2.